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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/580,661 | 02/15/2007 | Yoav Bar-Yaakov | 0-06-112 | 5008 |

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KEVIN D. MCCARTHY
ROACH BROWN MCCARTHY & GRUBER, P.C.
424 MAIN STREET
1920 LIBERTY BUILDING
BUFFALO, NY 14202

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| EXAMINER |
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BUIE-HATCHER, NICOLE M

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| ART UNIT | PAPER NUMBER |
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1796

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| MAIL DATE | DELIVERY MODE |
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12/29/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|---|--|--|
| Office Action Summary | Application No. 10/580,661 | Applicant(s) BAR-YAAKOV ET AL. | |
| | Examiner NICOLE M. BUIE-HATCHER | Art Unit 1796 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-21,25 and 27-36 is/are pending in the application.
- 4a) Of the above claim(s) 14-21 and 32-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-13,25 and 27-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Response to Amendment

The amendment filed 12/04/2009 has been entered. Claims 1-4, 6-21, 25, 27-36 remain pending. Claims 14-21 and 32-36 were previously withdrawn.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-4, 6-13, 25, and 27-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no description in the instant specification of a solid fluoropolymer being evenly dispersed in a flame retardant.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Georlette et al. (US 4,849,134) in view of Kitahara et al. (US 6,503,988 B1).

Regarding claims 1-4, 6, 25, 27, Georlette et al. discloses granular flame retardant agents containing one or more halogenated hydrocarbon flame retardant compounds (C2/L8-15). The halogenated hydrocarbon flame retardant compounds comprise decabromodiphenyl ether, tetrabromobisphenol A and its derivatives, tetrabromobisphenol A bis(allyl ether), bis(tribromophenoxy)ethane, and poly(pentabromobenzylacrylate) (C2/L45-C3/L9). Georlette et al. discloses additives which can be admixed with the flame retardant composition (C2/L37-44), including anti-dripping agents (claim 5). Since the additives and the flame retardant compounds

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are mixed (C2/L37-44), the composition will be evenly dispersed, absent objective evidence to the contrary.

However, Georlette et al. does not disclose a fluoropolymer. Kitahara et al. teaches polytetrafluoroethylene fine powder as antidripping agents (C2/L50-61). Georlette et al. and Kitahara et al. are analogous art concerned with the same field of endeavor, namely flame-retardant plastic materials. It would have been obvious to one of ordinary skill in the art at the time of invention to add the polytetrafluoroethylene of Kitahara et al. in a composition of Georlette et al., and the motivation to do so would have been as Kitahara et al. suggests using antidripping agents excellent in handling characteristics and dispersibility while maintaining antidripping property (C2/L41-45).

Regarding claim(s) 7, 8, 28, and 29, Georlette et al. does not disclose amount of antidripping agent. As the antidripping effect in the final thermoplastic composition is variable that can be modified by adjusting said amount of antidripping agent, the precise amount of antidripping agent would have been considered a result effective variable by one having ordinary skill in the art at the time the invention was made. Accordingly, one of ordinary skill in the art at the time the invention was made would have optimized, by routine experimentation, amount of antidripping agent, and the motivation to do so would have been to obtain desired antidripping effect in the final thermoplastic composition (*In re Boesch*, 617 F.2d. 272,205 USPQ 215 (CCPA 1980)), since it has been held that where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). See MPEP 2144.05.

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Regarding claims 9, 12, 13, and 30, since the flame retardants are the same as the preferred examples in the instant specification (See [0026] of the corresponding PG Pub), the flame retardants have a melting point below 300°C and melt viscosity lower than 2000 cp, absent objective to the contrary.

Regarding the method limitations recited in claim(s) 10 wherein the flame retardant is obtained from precursors having a melting point below 300°C, the examiner notes that even though a product-by-process is defined by the process steps by which the product is made, determination of patentability is based on the product itself. *In re Thorpe*, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985). As the court stated *in Thorpe*, 777 F.2d at 697, 227 USPQ at 966 (The patentability of a product does not depend on its method of production. *In re Pilkington*, 411 F. 2d 1345, 1348, 162 USPQ 145, 147 (CCPA 1969). If the product in a product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process). See MPEP § 2113.

Regarding claim 11, Georlette et al. discloses additives, such as lubricants and thermal stabilizers (C2/L37-44).

Response to Arguments

Applicant's arguments with respect to claims 1-4, 6-13, 25, and 27-31 have been considered but are moot in view of the new ground(s) of rejection.

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Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICOLE M. BUIE-HATCHER whose telephone number is (571)270-3879. The examiner can normally be reached on Monday-Thursday with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571)272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo/
Supervisory Patent Examiner, Art Unit 1796

/N. M. B./
Examiner, Art Unit 1796
12/11/2009